Claims:

Please amend the claims as follows:

1-2. (Canceled)

3. (Previously Presented) The composition of claim 45, wherein the polymer binder comprises a backbone, and said light attenuating compound is bonded to said backbone.

4. (Previously Presented) The composition of claim 45, wherein said light attenuating compound is bonded to a linkage unit and said linkage unit is bonded to the polymer binder.

5. (Original) The composition of claim 4, wherein said linkage unit comprises a moiety selected from the group consisting of cyclic alkyls, acyclic alkyls, acyclic heteroalkyls, and cyclic heteroalkyls.

6-15. (Canceled)

16. (Previously Presented) The composition of claim 47, wherein said linkage unit comprises a moiety selected from the group consisting of cyclic alkyls, acyclic alkyls, acyclic heteroalkyls, and cyclic heteroalkyls.

17-23. (Canceled)

24. (Previously Presented) The composition of claim 39, wherein the EWG of said light attenuating compound is selected from the group consisting of carbonyl, cyano, carboxyl, carboxamido, sulfonyl, and non-aromatic heterocyclic groups.

25. (Previously Presented) The composition of claim 39, wherein each of R_1 and R_2 of said light attenuating compound is individually selected from the group consisting of hydrogen, alkyls, and heteroalkyls.

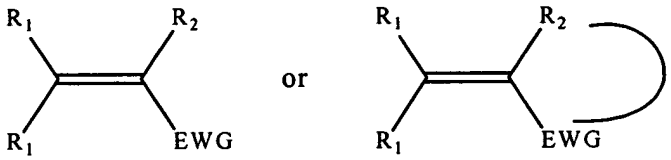
26. (Canceled)

27. (Previously Presented) The composition of claim 39, wherein said light attenuating compound comprises a moiety selected from the group consisting of COOH, OH, $CONH_2$, CONHR', CH_2X, and mixtures thereof, wherein R' is individually selected from the group consisting of hydrogen, alkyls, and heteroalkyls, and wherein X is a halogen.

28-35. (Canceled)

36. (Original) In a composition for use during microlithographic processes, said composition comprising a polymer binder dissolved in a solvent system, the improvement which comprises a non-aromatic, light attenuating compound comprising a moiety selected from the group consisting of:

(a)



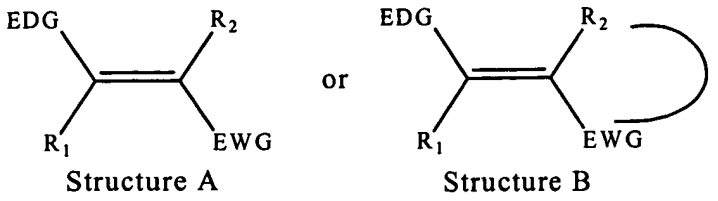
Structure A Structure B (I)

where:

- each R_1 is non-aromatic and is individually hydrogen, or an acyclic or cyclic alkyl or heteroalkyl;
- in structure A, where EWG and R_2 do not form a cyclic unit:

  EWG is a non-aromatic electron-withdrawing group; and

  R_2 is non-aromatic and is hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and
- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;



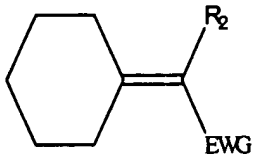
(II)

where:

- R_1 is non-aromatic and is individually hydrogen, or an acyclic or cyclic alkyl or heteroalkyl;
- EDG is an electron-donating group;
- in structure A, where EWG and R_2 do not form a cyclic unit:

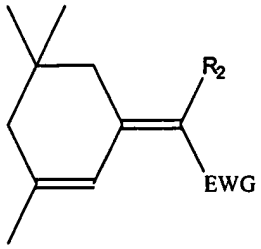
  EWG is a non-aromatic electron-withdrawing group; and

  R_2 is non-aromatic and is hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and
- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;



(X)

where: R_2 is non-aromatic and is individually hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and EWG is a non-aromatic electron-withdrawing group; and



(XI)

where: R_2 is non-aromatic and is individually hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and EWG is a non-aromatic electron-withdrawing group;

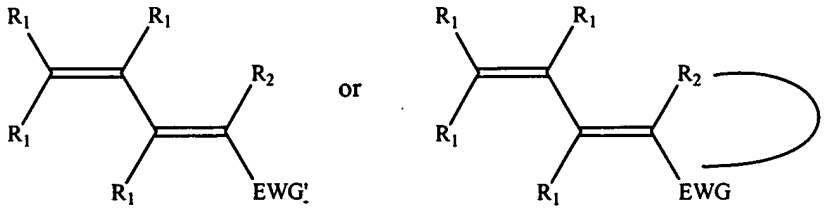
(b) olefinic moieties of (I), (II), and mixtures thereof; and

(c) mixtures of (a) and (b),

wherein said polymer binder comprises a backbone, and at least one of R_1 and R_2 of said light attenuating compound is bonded to the polymer binder backbone.

37-38. (Canceled)

39. (Currently Amended) In a composition for use during microlithographic processes, said composition comprising a polymer binder dissolved in a solvent system, the improvement which comprises a non-aromatic, light attenuating compound comprising a moiety selected from the group consisting of:

(a) 

Structure A Structure B (III)

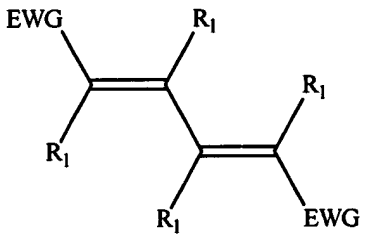
where:

- each R_1 is non-aromatic and is individually hydrogen, or an acyclic or cyclic alkyl or heteroalkyl;
- in structure A, where EWG' and R_2 do not form a cyclic unit:

  EWG' is a non-aromatic electron-withdrawing group selected from the group consisting of iminos, carboxylic acids, carboxylic esters, carboximido, and sulfonyls groups; and

  R_2 is non-aromatic and is hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group;
- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away

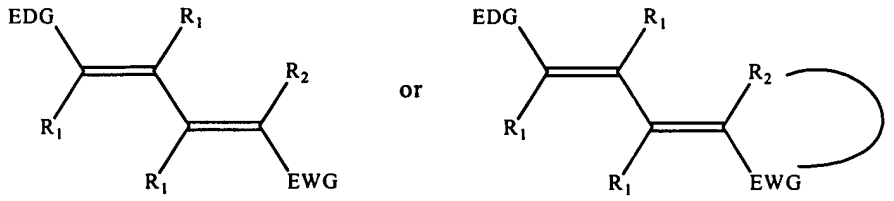
from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;



(IV)

where:

- each R_1 is non-aromatic and is individually hydrogen, or an acyclic or cyclic alkyl or heteroalkyl; and
- EWG is a non-aromatic electron-withdrawing group;



(V)

Structure A Structure B

where:

- each R_1 is non-aromatic and is individually hydrogen, or an acyclic or cyclic alkyl or heteroalkyl;
- EDG is an electron-donating group;
- in structure A, where EWG and R_2 do not form a cyclic unit:

EWG is a non-aromatic electron-withdrawing group other than cyano groups, and R_2 is non-aromatic and is hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; or

EWG is a cyano group, and R_2 is non-aromatic and is hydrogen, or an acyclic or cyclic alkyl or heteroalkyl; and

- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;

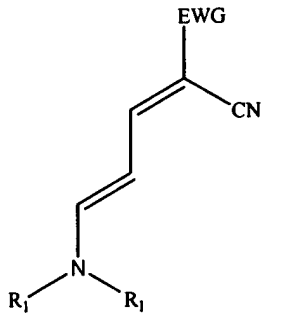
(b) diolefinic moieties of (III), (IV), (V), and mixtures thereof; and

(c) mixtures of (a) and (b),

wherein said polymer binder comprises a backbone, and at least one of R_1 and R_2 of said light attenuating compound is bonded to the polymer binder backbone.

40. (Canceled)

41. (Previously Presented) In a composition for use during microlithographic processes, said composition comprising a polymer binder dissolved in a solvent system, the improvement which comprises a non-aromatic, light attenuating compound comprising a moiety of



where EWG is a non-aromatic electron-withdrawing group selected from the group consisting of cyanos, iminos, carboxylic acids, carboxylic esters, carboximido, and sulfonyls groups; and

each R1 is individually selected from the group consisting of hydrogen and alkyls, wherein said polymer binder comprises a backbone, and EWG is bonded to said backbone.

42-44. (Canceled)

45. (Previously Presented) In a curable composition for use during microlithographic processes, said composition comprising a polymer binder dissolved in a solvent system, the improvement which comprises a non-aromatic, light attenuating compound which is bonded to the polymer binder and absorbs light at wavelengths of less than about 300 nm in said composition, said light attenuating compound comprising:

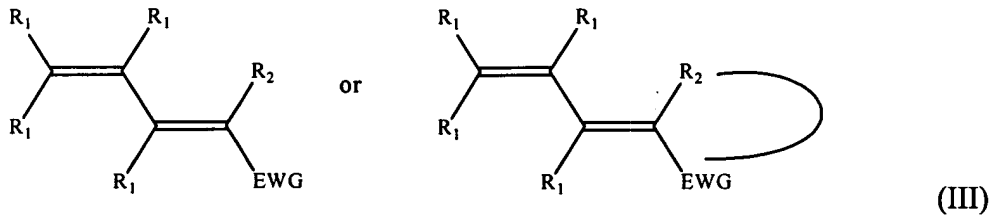
carbon atoms C_1 and C_2 double-bonded to one another and carbon atoms C_3 and C_4 double-bonded to one another and wherein C_3 is bonded to C_2 so as to form conjugated double bonds;

an EWG bonded to carbon atom C_1; and

an EDG bonded to carbon atom C_4, said EDG including a moiety selected from the group consisting of H_3CO, OH, and R_1-O-, wherein R_1 is non-aromatic and is selected from the group consisting of hydrogen, acyclic and cyclic alkyls, and heteroalkyls.

46. (Previously Presented) In a composition for use during microlithographic processes, said composition comprising a polymer binder dissolved in a solvent system, the improvement which comprises a non-aromatic, light attenuating compound comprising a moiety selected from the group consisting of:

(a)



(III)

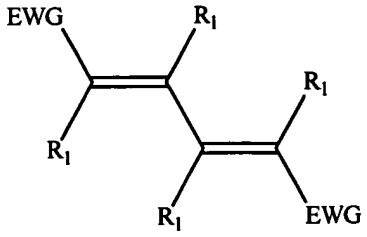
Structure A Structure B

where:

- each R_1 is non-aromatic and is individually selected from the group consisting of cyclic alkyls and acyclic alkyls;
- in structure A, where EWG and R_2 do not form a cyclic unit:

  EWG is a non-aromatic electron-withdrawing group; and

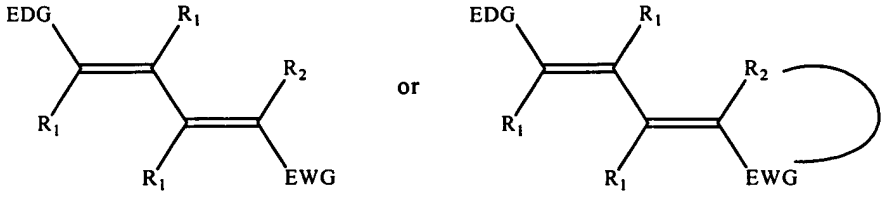
  R_2 is non-aromatic and is individually selected from the group consisting of cyclic alkyls and acyclic alkyls;
- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;



(IV)

where:

- each R_1 is non-aromatic and is individually selected from the group consisting of cyclic alkyls and acyclic alkyls; and
- EWG is a non-aromatic electron-withdrawing group;



Structure A Structure B

(V)

where:

- each R_1 is non-aromatic and is individually selected from the group consisting of cyclic alkyls and acyclic alkyls;
- EDG is an electron-donating group;
- in structure A, where EWG and R_2 do not form a cyclic unit:

  EWG is a non-aromatic electron-withdrawing group other than cyano groups, and R_2 is non-aromatic and is individually selected from the group consisting of cyclic alkyls and acyclic alkyls; or

EWG is a cyano group, and R_2 is non-aromatic and is individually selected from the group consisting of cyclic alkyls and acyclic alkyls; and

- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;

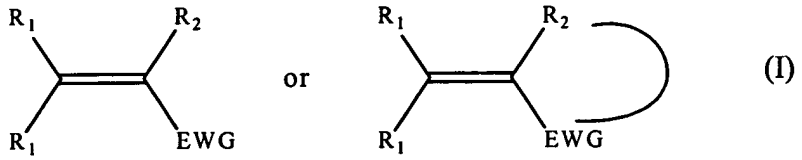
(b) diolefinic moieties of (III), (IV), (V), and mixtures thereof; and

(c) mixtures of (a) and (b),

wherein at least one of R_1 and R_2 of said light attenuating compound is bonded to the polymer binder.

47. (Previously Presented) In a composition for use during microlithographic processes, said composition comprising a polymer binder dissolved in a solvent system, the improvement which comprises a non-aromatic, light attenuating compound comprising a moiety selected from the group consisting of:

(a)



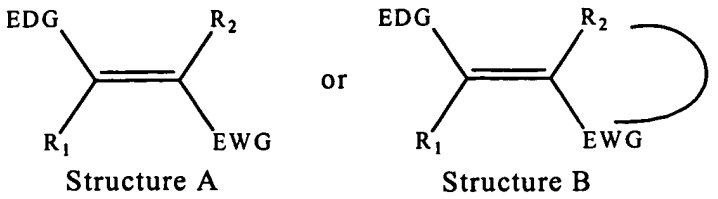
Structure A Structure B (I)

where:

- each R_1 is non-aromatic and is individually hydrogen, or an acyclic or cyclic alkyl or heteroalkyl;
- in structure A, where EWG and R_2 do not form a cyclic unit:

  EWG is a non-aromatic electron-withdrawing group; and

  R_2 is non-aromatic and is hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and
- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;



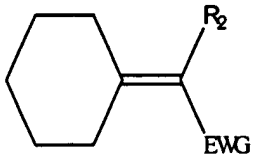
Structure A Structure B (II)

where:

- R_1 is non-aromatic and is individually hydrogen, or an acyclic or cyclic alkyl or heteroalkyl;
- EDG is an electron-donating group;
- in structure A, where EWG and R_2 do not form a cyclic unit:

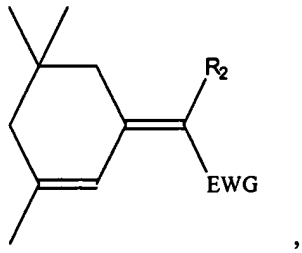
  EWG is a non-aromatic electron-withdrawing group; and

  R_2 is non-aromatic and is hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and
- in structure B, where EWG and R_2 form a cyclic electron-withdrawing unit, the cyclic unit comprises a C=O, C=S, or a C=N at a first carbon atom, and: a C=O or a C=N attached to a carbon atom at least two carbon atoms away from the first carbon atom; or an O, S, or N as a member of the ring at least two positions away from the first carbon atom;



(X)

where: R_2 is non-aromatic and is individually hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and EWG is a non-aromatic electron-withdrawing group; and



(XI)

where: R_2 is non-aromatic and is individually hydrogen, an acyclic or cyclic alkyl or heteroalkyl, or an electron-withdrawing group; and EWG is a non-aromatic electron-withdrawing group;

(b) olefinic moieties of (I), (II), and mixtures thereof; and

(c) mixtures of (a) and (b),

wherein at least one of R_1 and R_2 of said light attenuating compound is bonded to a linkage unit and said linkage unit is bonded to the polymer binder.